SURGICAL TREATMENT OF TRIFACIAL NEURALGIA.*

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Nine years ago I began the systematic treatment of trifacial neuralgia and determined to follow up every case that came under my observation until the patient was more or less permanently relieved, abandoned treatment or died.

During this period I have treated about twenty cases. The first five cases were treated either medically or by resection of the peripheral branch of the affected nerve. The cases treated medically were little relieved. Those in whom the peripheral branches were resected were relieved for from one to two years.

Five years ago I began to use osmic acid injections into the exposed nerve-trunks and into the foramina of exit, according to the technic advised by Dr. John B. Murphy. In this way I treated three cases successfully. One of these, a very severe case, suffering intense spasms in the lingual and inferior dental branches, was completely relieved for four years. The pain recurred at this time, in the same areas of distribution, only more severe. Deep injections of alcohol repeated four times gave only transient relief, when I again exposed the branches in the mouth, resected them, and again injected a 2% osmic acid solution. This operation has given complete relief, as at first.

About one year ago I began the use of deep alcohol injections using the special needle and the technic of Levy and Baudouin. Up to the present time I have given twenty-eight injections in fifteen patients.

I will leave the detailed reports of cases for another time and only attempt to summarize the results with a few comments on the method and its value. Of these fifteen cases all have received some relief from pain. In two cases the relief was of short duration. In one of these I had previously injected osmic acid, producing a very dense scar in the inferior maxillary branch just before it enters the inferior dental canal. The other case had an operation on the infra orbital branch with only temporary relief. These two cases suggest the possibility that previous operations, with the subsequent scar tissue, interfere with the analgesic action of the alcohol upon the distal portions of the nerve.

Of the remaining cases, nine have received immediate and complete relief which has lasted periods varying from one year to one month. The other four cases I have not heard from or are too recent to report.

The technic is extremely simple and may be carried out by any one familiar with the anatomical landmarks.

Patients afflicted with this disease have suffered so much pain that they bear the pain of injection with slight complaint. I have given an anesthetic but twice for the purpose of injection. I find it unnecessary to use a special needle, although it is safer until one learns the landmarks, the direction in which to go and the depth at which you may expect to reach the nerve. I now use an ordinary exploring needle and a glass syringe holding 2 c. c. of fluid. This needle causes much less pain and penetrates the tissues more easily.

I no longer attempt to remember the intricate anatomic directions given by the originators of this method, but locate the point of injection in the following very simple way:

Place the index finger firmly against the face just beneath the zygoma and ask the patient to open his mouth. In this way you can locate the condyle of the lower jaw, the sigmoid notch and the coronoid process. The injection for the inferior maxillary branch is made just in front of the condyle through the sigmoid notch. The needle hugs the inferior border of the zygomia and is carried a little upward and backward to a depth of 4 centimeters.

The injection for the middle or superior maxillary branch is made just in front of the coronoid process which can be distinctly felt when the patient opens his mouth. The needle again hugs the zygoma and is carried slightly upward and inward to a depth of 5 centimeters.

The injection for the ophthalmic branch is through the orbit close to its outer wall to a depth of 4 centimeters. This injection I believe is too dangerous and unreliable to command confidence.

The solution I have used has been either alcohol 80% to 90% or alcohol 80% containing cocaine or novocaine ¼ grain to 10 c. c. Two cubic centimeters are injected at each treatment.

If the patient is not relieved after three or four injections I advise osmic acid injections for the inferior maxillary, and resection with osmic acid injection for the infra, and supra orbital branches.

Every case coming to me thus far has been relieved by these measures. Should they fail to relieve I would divide the sensory roots within the skull, just as they are given off from the gasserian ganglion. I do not believe that this serious and difficult operation should be undertaken until the simpler operations have been thoroughly tried. I have found that the cases of recent origin yield most readily to the injection method.

If all cases of *tic douloureux* are recognized early and treated with alcohol injections before the pathologic changes have progressed far, I believe it will reduce the number requiring the severer operations.

* Read at the Thirty-ninth Annual Meeting of the State Society, San Jose, April, 1909.

CUTANEOUS ANESTHESIA AS A SYMPTOM OF OSTEOMYELITIS.*

Report of a Case.

By HARRY I. WIEL, M. D., San Francisco.

The accompanying case seems so clear that there will truly be no justification for animadverting to it were it not rather unusual; so much so that those of us who saw it considered it striking. The history as far as concerns this presentation is as follows:

Mr. S., single, unmarried, aged forty-seven, came to me February 6th, 1909, complaining of pain in left knee readily diagnosed as gout, I having treated the patient in many previous attacks. He was given the routine treatment of colchicum mixture with some aspirin and local compresses. The gout improved

* Read before the San Francisco County Medical Society.